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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,067	07/18/2003	Eric Liau	M&N-IT-466	2690
24131	7590	10/05/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			TAT, BINH C	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/623,067	<b>Applicant(s)</b> LIAU, ERIC	
	<b>Examiner</b> Binh C. Tat	<b>Art Unit</b> 2825	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/18/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in response to application 10/623067 file on 07/18/03.

Claim 1-26 remain pending in the application.

#### ***Claim Objections***

Claims 1, 15, 22, and 26 objected to because of the following informalities: improper format claim; The Markush format cannot be use for the claim preamble. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Scott et al. (US Patent 6782515).

3. As to claims 1, 15, and 22-26, Scott et al. teach a method of generating simulating and testing a layout of an integrated circuit, the method which comprises the steps a set of test patterns for one of (a) generating a set of test patterns on a random basis (see col 6 lines 42-61); applying the set of test patterns test equipment (see col 7 lines 1 to col 9 lines 54); an integrated circuit by using an automatic (c) determining outputs of the integrated circuit (see col 7 lines 1 to col 9 lines 54); (d) processing the outputs in order to test criteria are met (see col 7 line 34 to col

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10 lines 44); and (e) determine whether given result in step generating a new set of test patterns based on the set of test patterns generated in step (a) by using a genetic algorithm (see col 7 line 34 to col 10 lines 44).

4. As to claims 2, and 18 Scott et al. teach which comprises repeating steps (b) until the given test criteria are met (see col 7 lines 1 to col 9 lines 54).

5. As to claims 3, and 19 Scott et al. teach which comprises (f) repeating steps (b) to until a condition is met, the condition being selected from the group consisting of meeting the given test criteria and repeating steps (b) to (e) a given number of times (see fig 5 col 11 lines 20 col 12 lines 65).

6. As to claims 4, Scott et al. teach which comprises: generating a new the given test to the given number of times; and set of test patterns on a random basis, if repeating steps repeating step (f) based on the new set of test patterns (see fig 5 col 11 lines 20 col 12 lines 65).

7. As to claims 5 Scott et al. teach which comprises concluding that the given test criteria are met patterns is if the set of test pattern is associated with an average fitness above a given value (see fig 5 col 11 lines 20 col 12 lines 65 and background).

8. As to claims 6, Scott et al. teach wherein step (e) includes combining at least some of the test patterns according to the genetic algorithm in order to generate new set test (see col 7 lines 1 to col 9 lines 54).

9. As to claims 7, Scott et al. teach which comprises: selecting test patterns from the set of test patterns according to given selection criteria in order to provide selected test patterns; and combining the selected test patterns according to the genetic algorithm in order to generate the new set of test patterns (see col 7 lines 1 to col 9 lines 54).

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10. As to claims 8 Scott et al. teach which comprises selecting a test pattern if the test pattern is associated with a fitness value greater than a reference value (see fig 5 col 11 lines 20 col 12 lines 65 and background).

11. As to claims 9, Scott et al. teach which comprises: selecting a test pattern if the test pattern is associated with a highest fitness value of all unselected test patterns (see fig 5 col 11 lines 20 col 12 lines 65 and background).

12. As to claims 10 Scott et al. teach which comprises repeating step (g) until a give percentage of test patterns has been selected (see fig 5).

13. As to claims 11, Scott et al. teach wherein step (e) includes: (h) sorting the selected test patterns according to an order of associated fitness values (see col 7 lines 1 to col 9 lines 54); randomly selecting parent test patterns as sorted in step (h) order from test patterns to provide selected parent test patterns (see col 7 lines 1 to col 9 lines 54); and combining the selected parent test patterns (see col 7 lines 1 to col 9 lines 54).

14. As to claims 12 Scott et al. teach which comprises using, as the genetic algorithm, an algorithm having at least one element selected from the group consisting of crossing over, recombination, and a mutation of selected ones of the test patterns (see fig 5).

15. As to claims 13, Scott et al. teach wherein step (a) includes generating a plurality of sets of test patterns, each set of test patterns being included test pattern population (see fig 5).

16. As to claims 14 Scott et al. teach which comprises performing steps (a) to (e) for each respective test pattern population (see fig 5 col 11 lines 20 col 12 lines 65 and background).

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17. As to claims 16, Scott et al. teach which comprises generating the plurality of sets of input signals such that at least some of the input signals are associated with a number AC/DC parameters (see fig 5 col 11 lines 20 col 12 lines 65 and background).

18. As to claims 17 Scott et al. teach which comprises of each respective one providing respective given parameters the sets of input signals such that given parameters of each one of the sets of input signals varies from given parameters of each other one of the sets of input signals (see col 7 line 34 to col 10 lines 44).

19. As to claims 20, Scott et al. teach which comprises concluding that the given test criteria are met if the plurality sets input signals associated with a worst case of operation situation (see fig 5).

20. As to claims 21 Scott et al. teach wherein step (q) includes combining at least some of corresponding ones the input signals of different sets of input signals according the genetic algorithm in order generate a new set of input signals (see col 7 lines 1 to col 9 lines 54).

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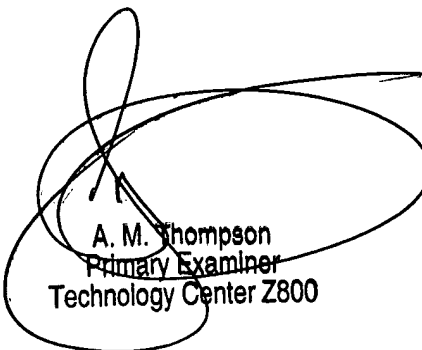
***Conclusion***

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is (571) 272-1908. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Smith can be reached on (571) 272-1907. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-1908 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Binh Tat  
Art unit 2825  
September 30, 2004



A. M. Thompson  
Primary Examiner  
Technology Center Z800